

02/22/2008

Appln. no. 10/822,077

Response dated January 14, 2008

Advisory Action dated February 7, 2008

## Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims in the application.

### Listing of Claims

1. (canceled)

2. (canceled)

3. (canceled)

4. (canceled)

5. (canceled)

6. (canceled)

7. (currently amended) The digital filter of claim 6 9, wherein each filter coefficient value represents a dispersion compensation value associated with the optical link.

8. (canceled)

9. (currently amended) A digital filter comprising:

one or more functional units, each functional unit being associated with a lookup table of filter coefficient values, each functional unit to process an input data stream using the filter coefficient values in the lookup table and to generate one or more output data streams for transmission on an optical link; and

wherein the lookup table is a multi-port memory having a plurality of multi-bit read ports, each read port storing a filter coefficient value;

wherein each functional unit further comprises: